67-28-05



AF/36220

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

: 09/669,486

**Applicant** 

: FLOCKHART et al.

Filed:

: September 25, 2000

TC/A.U.

3622

Examiner:

KEMPER, MELANIE A.

Docket No.

4366-20

Customer No.

48500

Title:

"ROUTING BASED ON THE CONTENTS OF A SHOPPING CART"

"EXPRESS MAIL" MAILING LABEL NUMBER: EV 556791555 US

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE

UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX

DATE OF DEPOSIT: 7/26/05

TYPED OR PRINTED NAME:

1450, ALEXANDRIA, VA 22313-1450.

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### TRANSMITTAL LETTER

Dear Sir:

Enclosed please find in triplicate an "APPELLANT'S BRIEF ON APPEAL" for the above-identified patent application. Please charge Deposit Account No. 50-1602 in the amount of \$500.00 as fee for filing a brief in support of an appeal for a large entity.

In the event of overpayment or underpayment of a required fee, the Commissioner is authorized to charge or credit fees deemed necessary to Deposit Account No. 50-1602.

Respectfully submitted,

SHERIDAN ROSS P.C.

Douglas W. Swartz

Registration No. 37,739

1560 Broadway, Suite 1200

Denver, Colorado 80202-5141

(303) 863-9700

Date: July 26 2005



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

09/669,486

**Applicant** 

: FLOCKHART et al.

Filed:

September 25, 2000

TC/A.U.

3622

Examiner:

: KEMPER, MELANIE A.

Docket No.

4366-20

Customer No.

: 48500

Title:

"ROUTING BASED ON THE CONTENTS OF A SHOPPING CART"

SIGNATURE:

DATE OF DEPOSIT: 7/26/05

TYPED OR PRINTED-NAME:

1450, ALEXANDRIA, VA 22313-1450.

"EXPRESS MAIL" MAILING LABEL NUMBER: EV 556791555 US

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE

UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

#### **NOTICE OF APPEAL**

Dear Sir:

Applicant hereby appeals to the Board of Appeals from the decision of the Examiner mailed April 26, 2005, finally rejecting Claims 44, 45, and 47-84. Please charge Deposit Account No. 50-1602 in the amount of \$500.00 for the Notice of Appeal fee specified in 37 CFR §1.17(b). The Notice of Appeal is believed to be timely and no additional fee is believed to be required. Please credit any overpayment or debit any underpayment to Deposit Account 50-1602.

Respectfully submitted,

07/29/2005 SSITHIB1 00000033 501602

09669486

01 FC:1401

500.00 DA

SHERIDAN ROSS P.C.

Douglas W. Swartz

Registration No. 37,739 1560 Broadway, Suite 1200

Denver, Colorado 80202-5141

(303) 863-9700

Date: July 26, 2005

# JUL 2 6 2005 UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

09/669,486

**Applicant** 

: FLOCKHART et al.

Filed:

: September 25, 2000

TC/A.U.

3622

Examiner:

KEMPER, MELANIE A.

Docket No.

4366-20

Customer No.

: 48500

Title:

"ROUTING BASED ON THE CONTENTS OF A SHOPPING CART"

SIGNATURE:

"EXPRESS MAIL" MAILING LABEL NUMBER: EV 556791555 US

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE

UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX

DATE OF DEPOSIT: 7/26/05

TYPED OR PRINTED NAME:

1450, ALEXANDRIA, VA 22313-1450.

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## **APPELLANT'S BRIEF ON APPEAL (37 CFR § 1.192)**

#### Dear Sir:

This is an appeal under 37 CFR§1.191 to the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office from the final rejection of claims 44, 45, and 47-84 of the above-identified patent application. These claims were indicated as finally rejected in an Office Action dated April 26, 2005. Three copies of the brief are filed herewith. Please charge Deposit Account No. 50-1602 for the fee required under 37 CFR §1.17(c). Although Appellant believes that no other fees are associated with this appeal, please charge any such fees to Deposit Account No. 50-1602. The structure of the Brief is as follows in accordance with 37 CFR §1.192(c):

- I. Real Party in Interest
- II. Related Appeals and Interferences

07/29/2005 SSITHIB1 00000034 501602 09669486 01 FC:1402 500.00 DA

- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Invention
- VI. Issues
- VII. Grouping of Claims
- VIII. Section 103 Standard for Patentability
- IX. Arguments Rejections under 35 U.S.C. Section 103
- X. Conclusion

## Appendices

A. Claims involved in the appeal;

# I. REAL PARTY IN INTEREST

Avaya Technology Corp. is the owner of the patent application and the real party in interest.

## II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to this patent application.

## III. STATUS OF CLAIMS (37 CFR §1.192(c)(1))

The status of the claims is as follows:

- 1. Claims canceled: 1-43 and 46.
- 2. Claims withdrawn from consideration but not cancelled: None;
- 3. Claims pending: 44, 45, and 47-84;

- 4. Claims allowed: None;
- 5. Claims rejected: 44, 45, and 47-84; and
- 6. Claims appealed: 44, 45, and 47-84 as set forth in Appendix A.

## IV. STATUS OF AMENDMENTS (37 CFR §1.192(c)(2))

Appellant filed an Amendment and Response on September 25, 2000, responsive to an Office Action mailed September 15, 2003. A final Office Action was mailed April 13, 2004 and designated by the Examiner as being responsive to the September 25, 2000, Amendment and Response. Appellants filed a Request for Continued Examination and Amendment After Final on July 13, 2004. An Office Action designated by the Examiner as being responsive to the Amendment After Final was mailed on October 12, 2004. A further Amendment and Response responsive to the October 12, 2004, Office Action was mailed on January 27, 2005. Finally, a Final Office Action was mailed April 26, 2005, responding to the January 27, 2005, Amendment and Response. Appellants have filed no amendments after receipt of the April 26, 2005, final Office Action.

#### V. SUMMARY OF INVENTION (37 CFR §1.192(c)(3))

E-commerce web-sites are becoming increasingly popular with consumers as an efficient, convenient and low cost way to shop for merchandise. In a typical E-commerce web-site, the customer's web browser accesses web pages provided by the web-site's web server. The customer can add merchandise to be purchased to a "shopping cart" by clicking on an icon. The shopping cart is a data structure typically stored on the customer's computer or on the web server. When the customer desires to complete the order, the data structure is forwarded along with a

cookie identifying the customer to the web server which processes the order. (Specification at page 1, line 20, to page 2, line 2.) As will be appreciated, a "cookie" is information that is stored on a user's computer by a browser, typically at the request of software at a web-site.

In an illustrative E-commerce architecture shown in Fig. 1, a contact center 10 is connected via communication lines 40 to a plurality of customer interfaces 51a-d (e.g., graphical interfaces). (Specification at page 10, lines 17-20.) Each interface 51a-d is typically a computer, such as a personal computer, that includes a memory 70 and attached processor 74. The memory 70 includes a web browser 76, one or more web pages 78, a data structure 82, such as a shopping cart, for recording items (goods or services) selected by the customer for possible purchase, an identifier 86, such as a cookie, that is unique to the customer and is referenced in some manner by the data structure 82, and an evaluator 90, such as an applet, for examining or evaluating the contents of the data structure 82 in response to a signal from the contact center 10. Web-sites typically use cookies to recognize users who have previously visited them. (Specification at page 11, lines 9-18.) The contact center 10 includes a router 80 for routing contacts to an appropriate queue 42 or 46 for servicing by a working (human) agent and a comparer 84 for providing input to the router 80 relating to the relative priority of each contact. (Specification at page 11, lines 5-8.)

An evaluator 90 is on the customer's computer for examining or evaluating the contents of the data structure 82. The evaluator 90 can be configured as an applet, or an application program that is downloaded automatically through a Web browser and executed on the customer's computer. This configuration is particularly useful in E-commerce web sites associated with an Internet contact center. (Specification at page 3, lines 17-21.)

An embodiment of the operation of the router 80 and comparer 84 is illustrated in Figs. 1-3. After a customer has viewed one or more web pages 78 and selected one or more items that have been recorded in the data structure 82, the customer in box 100 sends a message to the contact center 10, such as by clicking on an icon on a web page. The signal may itself be a contact for handling by a working (human) agent 14 or may initiate a contact with a working agent 14. The evaluator 90 determines the value(s) (box 104) and/or type(s) (box 150) of one or more items in the data structure 82. (Specification at page 12, lines 11-19.) The comparer 84 compares the value(s) and/or type(s) of the item(s) in the data structure 82 with one or more predetermined value(s) and/or item type(s). The router 80 assigns a predetermined priority to the contact or contact request based on the results of the comparing step and directs the contact or contact request to an appropriate route point. (Specification at page 12, line 20, to page 13, line 5, and page 13, line 17 to page 14, line 13.) A number of comparing steps can be used for a range of predetermined priorities.

The architecture can have a number of advantages. For example, the use of the value of item(s) in the collection and/or type(s) of item(s) in the collection to determine the quality and skills of the agent to service the customer and/or to prioritize the contact or contact request should curtail abandonment of high-value transactions and thereby reduce overall business losses. The architecture can be used to identify item types having a high priority or desirability for servicing. (Specification at page 3, lines 11-14.) Certain types of items can have a high success rate for completing sales and/or a high success rate for cross-selling other items and/or over-stocked inventories. Alternatively, the architecture can be used to identify low priority items or items that are less desirable for servicing. For example, certain types of items can have

a low success rate for completing sales, a low success rate for cross-selling other items and/or low inventories. (Specification at page 14, lines 14-20.)

With specific reference to the claims, independent claim 44 is directed to a method that includes the steps:

- (a) providing, on a first communication channel and as part of a first contact with a customer, the first contact being a potential sales transaction with the customer, at least one web page to a web browser associated with the customer, wherein the customer selects, for possible purchase, a set of one or more items from the provided at least one web page (Specification at page 11, line 9, to page 12, line 10);
- (b) receiving, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected by a second contact with the customer on a second communication channel different from the first communication channel (Specification at page 11, line 19 to page 12, line 10);
- (c) downloading, onto a computer executing the customer's web browser, an applet (Specification at page 3, lines 15-21.);
- (d) evaluating at least one item in the set of one or more items to identify at least one of
  (i) an item value and (ii) item type in the set, wherein step(d) is performed by the applet when the
  applet is being executed by the customer's computer (Specification at page 12, lines 11-19); and
- (e) routing the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) item value and (ii) item type. (Specification at page 12, line 20, to page 13, line 5). The set of one or more items is a shopping cart, wish cart, and/or wish list (Specification at page 3, lines 3-6, and page 4, lines 5-6).

Independent claim 58 is directed to a system that includes:

- (a) a server operable to (i) provide, on a first communication channel and as part of a first contact and a potential sales transaction with a customer, at least one web page to a web browser associated with the customer, wherein the customer selects, for possible acquisition, a set of one or more items from the provided at least one web page; and (ii) receive, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected by a second contact with the customer on a second communication channel different from the first communication channel (Specification at page 11, line 19 to page 12, line 10);
- (b) an evaluator operable to evaluate at least one item in the set of one or more items to identify at least one of (i) an item value and (ii) item type in the set (Specification at page 12, lines 11-19); and
- (c) a router operable to route the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) item value and (ii) item type (Specification at page 12, line 20, to page 13, line 5). The server is operable to effect downloading, onto a computer executing the customer's web browser, an applet comprising the evaluator (Specification at page 3, lines 15-21).

Independent claim 71 is directed to a method for routing contacts in an E-commerce contact center. The method includes the steps:

(a) providing, on a first communication channel and as part of a potential sales transaction with a customer, at least one web page to a web browser associated with the

customer, wherein the customer selects, for possible purchase, a set of one or more items from the provided at least one web page (Specification at page 11, line 19 to page 12, line 10);

- (b) receiving, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected on a second communication channel different from the first communication channel (Specification at page 11, line 19 to page 12, line 10);
- (c) downloading, onto a computer executing the customer's web browser, an applet comprising an evaluator (Specification at page 3, lines 15-21.);
- (d) the downloaded evaluator evaluating at least one item in the set of one or more items to identify at least one of (i) a value of one or more items and (ii) a type of one or more items in the set;
- (e) receiving from the downloaded evaluator an identified at least one of (i) a value of one or more items and (ii) a type of one or more items in the set (Specification at page 12, lines 11-19); and
- (f) routing the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) a value of one or more items and (ii) a type of one or more items in the set (Specification at page 12, line 20, to page 13, line 5).

Dependent claims 45, 59, and 72 require the first contact on the first communication channel to be a Web browsing session, the second contact on the second communication channel to be one of a live voice communication, an electronic mail message, and a facsimile, and part of

the first and second contacts to overlap temporally. (Specification at page 3, lines 8-14; page 4, lines 1-10; and page 11, line 19 to page 12, line 10.)

Dependent claims 50, 64, and 77 require the identified value and/or item type to be contained in a cookie received from the customer's computer. (Specification at page 11, lines 9-18, and page 12, lines 2-3.)

#### VI. <u>ISSUES (37 CFR §1.192(c)(4))</u>

A. Whether Claims 44-45 and 47-84 are unpatentable over Miloslavsky et al. (U.S. 6,597,685) combined with Walker (U.S. 6,088,444)?

## VII. GROUPING OF CLAIMS (37 CFR §1.192(c)(5))

- A. Claims 44, 57-58, 60, 71, 73-76, and 84 stand and fall together.
- B. Claims 45, 59, and 72 stand and fall together.
- C. Claims 47-48, 51, 53-55, 61-62, 65, 67-69, 78, and 80-82 stand and fall together.
  - D. Claims 49, 52, 63, 66, and 79 stand and fall together.
  - E. Claims 50, 64, and 77 stand and fall together.
  - F. Claims 56, 70, and 83 stand and fall together.

#### VIII. SECTION 103 STANDARD FOR PATENTABILITY

The Examiner has rejected all of the pending claims under 35 U.S.C. §103 which provides in relevant part:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject

matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. §103 (1984).

"A prima facie case of obviousness is established [by an examiner] when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Rijckaert, 28 USPQ2d (BNA) 1955, 1956. (quoting In re Bell, 26 USPQ2d (BNA) 1529, 1531 (Fed. Cir. 1993). Specifically, there must be some reason, suggestion, motivation, or incentive in the prior art references to combine the various teachings in a manner which defines the claimed combination. In re Fine, 5 USPQ2d (BNA) 1596, 1599 (Fed. Cir. 1988). In the absence of this reason, suggestion, motivation, or incentive to combine the teachings of the prior art in the manner set forth in the claimed invention, the claimed combination cannot be deemed to be obvious. In re Fritch, 23 USPQ2d (BNA) 1780, 1783 (Fed. Cir. 1992).

A <u>prima facie</u> case of obviousness can be rebutted by a patent applicant based upon the presentation of evidence and/or arguments as to why a <u>prima facie</u> case does not exist. <u>Id</u>.

Arguments which may be persuasive to rebut an alleged <u>prima facie</u> case of obviousness include without limitation that: (1) the proposed combination does not in fact disclose or suggest all of the limitations present in a given claim (e.g., all claim elements are not disclosed by the combination asserted by the examiner), <u>In re Rijckaert</u>, 28 USPQ2d (BNA) at 1957; (2) there would be no motivation to combine the teachings in the manner suggested by the examiner since the problem confronted by the patent applicant differed from those addressed in the particular

prior art teachings, <u>In re Fine</u>, 5 USPQ2d (BNA) at 1599; (3) the prior art actually teaches away from the proposed combination of prior art references suggested by the examiner, <u>Id.</u>; <u>Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.</u>, 227 USPQ (BNA) 657, 666-67; and (4) the examiner has used impermissible hindsight by using the patent applicant's specification as a blueprint to reconstruct the claimed invention from the references, <u>In re Fritch</u>, 23 USPQ2d (BNA) at 1784.

"After evidence or argument is submitted by the applicant in response [to the examiner's proffered <u>prima facie</u> case], patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument." <u>In re Oetiker</u>, 24 USPQ2d (BNA) 1443, 1444 (Fed. Cir. 1992). That is, all "facts" which are presented are relevant to the obviousness inquiry and must be considered in judging the patentability of the claimed invention. <u>Ashland Oil</u>, 227 USPQ (BNA) at 664.

#### IX. ARGUMENTS - REJECTIONS UNDER 35 U.S.C. SECTION 103

A. Rejection of Claims 44-45 and 47-84 Under 35 U.S.C. §103 in View of the Miloslavsky et al. and Walker Patents.

The Examiner rejected Claims 44-45 and 47-84 under 35 U.S.C. §103 as being obvious in view of the Miloslavsky et al. and Walker et al. Patents.

#### 1. The Miloslavsky et al. Patent.

Miloslavsky et al., the primary reference, is directed to an IP-capable contact routing system. With reference to Fig. 5, a voice/data communication system 1100 includes a provider site 1102 and a customer site 1104 connected by a data communication network 1106, such as the Internet. Provider site 1102 sends (via Internet 1106) product information, order forms,

confirmation notices, etc., to customer site 104, and customer site 1104 sends in (again via Internet 1106) orders, shipping address, and payment information to the provider site. The customer site 1104 includes a client computer 1114 running a browser 1116 and a telephone 1128. The provider site 1102 includes a server 1132 connected to the Internet 1106 for supplying web documents (e.g., product information, order forms, etc.) to browsers. The provider site 1102 contains a service assistance center 1140 in which a number of agents can take telephone calls from users in various customer sites. (Col. 10, lines 36 to col. 11, line 34.) A customer can click on an icon on a web page to order a product associated with the icon. The server 1132 receives and processes the order. (Col. 12, lines 4-8.) When the user is in customer site 1104 reviewing information on the browser 1116 or is about to place an order, the user may request the attention of a service agent in service assistance center 1140. (Col. 12, lines 9-12.) The user clicks on an icon, such as button 1118, to initiate telephone communication with the service assistance center 140. (Col. 12, lines 44-49.) When the button 1118 is clicked, the browser 1116 sends a telephone service request to "phone.html" in server 1132, which then sends the request and associated data (e.g., identity of customer site 1104 and the HTML document associated with the web page displayed on the browser 1116) to a service request process (SRP) 1168. (Col. 12, line 64, to col. 13, line 2.) "SRP selects an available service agent in accordance with predetermined criteria (e.g., availability of agents, previous interaction between a certain agent and customer site 1104)." (Col. 13, lines 4-7.) The information displayed to the user is delivered to the agent's computer 1146 so that the user and servicing agent can view the same information. (Col. 13, lines 10-16.)

#### 2. The Walker et al. Patent.

Walker et al. is directed to a priority call queuing system that allows the called site to exercise control over the position in a phone queue of an incoming call based on the economic value assigned to the incoming call. The system includes a PBX 10, an ACD 12, and an IVRU 14. (Col. 3, lines 15-19.) A data storage device 58 includes a call distribution procedure 60 that enables handling of queue 56 and other functions performed by the ACD 12. Data storage device 58 further includes a call database 62, a product order database 64, and a value database 66. Call database 62 includes a listing of the calling phone number, a call tracking number assigned by the ACD 12, the position of the call within the call queue, a time received value, and one or more product order number(s) derived from the interaction of the customer and IVRU 14. The product order database 64 includes, for each call, the call tracking number, the quantity of items ordered, the item numbers of the items ordered, the item price and description, and a catalog number for each ordered item. The value database 66 includes, for each call, the call tracking number, a product order number, the quantity of items ordered, an assigned economic value as calculated by the ACD 12, and a resultant queue position assigned by the ACD 12. (Col. 4, line 45, to col. 5, line 13.)

When the incoming call is received, the call is assigned an initial call queue position (col. 5, lines 36-40), and the IVRU 14 interrogates the caller and determines information such as identity of the caller, quantity of items to be ordered, item numbers, catalog numbers, and other data from which an economic value of the call can be determined (col. 2, lines 52-57). The caller's responses to the queries are preferably caller-entered DTMF signals that are converted into data values by IVRU 14. (Col. 3, lines 38-40.) The economic value of a call can be based upon a total number of items ordered, a total dollar amount of the order and/or the profitability of

the order and the status of the customer. (Col. 3, line 64-col. 4, line 8.) Thereafter, the call information is used, in conjunction with pricing and other economic data, present in a database at the called site, to assign an economic value to the call. (Col. 3, lines 46-48.) The call's position in the queue is then adjusted in a manner that is hidden from the caller, in accordance with the determined economic value. The rank positions of other calls within the queue are adjusted accordingly. (Col. 3, lines 48-63.)

B. Neither Miloslavsky et al. Nor Walker et al. Teach or Suggest the Routing of a Second Contact with a Customer on a Second Channel Based on Information, Such as Item Value and/or Type, Obtained in a First Contact with the Customer on a First Channel - Claims 44-45 and 47-84 (Claim Groups A-F).

At col. 12, line 2-col. 13, line 16, Miloslavsky et al. describes an E-commerce site and sales methodology depicted in Fig. 5. The customer can place an order by clicking on an order icon or request service by clicking on a help icon. When the "help" icon is selected by the customer, a separate telephone communication is established with the agent. Regarding routing of the "help" request to an agent, Miloslavsky et al. states at col. 12, line 64 to col. 13, line 7) as follows:

When button 1118 is clicked, browser 1116 sends a telephone service request to "phone.html" in server 1132. Server 1132 then sends the request and associated data (e.g., the identity of the customer site 104 and the HTML document associated with the web page displayed on browser 1116) to a service request process (SRP) 1168. SRP 1168 is a software module which could run on server 1132 or on a separate data processing device. SRP 1168 selects an available service agent in accordance with predetermined criteria (e.g., availability of agents, previous interaction between certain agent and customer site 1104).

(Emphasis added.) At col. 13, lines 45-49, Miloslavsky et al. further states that traditional agent skills (such as language skill, knowledge of products, etc.) could be used by SRP 1168 as some of the factors in selecting an appropriate service agent to interact with a particular user.

In the web sales architecture of Fig. 5, "product expertise" does not inherently mean or suggest that the E commerce site analyzes the product order contained in the Web page displayed to the customer. In the same manner that "sales expertise" does not refer necessarily to a skill to sell only a specific type of product among a number of retailer's or wholesaler's product types, "product expertise" does not necessarily mean that the agent has expertise only with a specific type of product. "Product expertise," for example, can be a skill of the agent in performing tasks associated with product questions generally (rather than a specific expertise for a specific type of product in the customer-selected grouping of products), whether in connection with sales transactions or answering product-related questions. For example, the agent having "product expertise" could have a high level of skill in answering warranty or operating questions about all of a retailer's products. Even if "product expertise" does refer to knowledge of a subset of products offered by a business, the statement that SRP 1168 effects agent selection based on "previous interaction between certain agent and customer site 1104" indicates that the "product expertise" involves product types historically purchased by the identified customer. There is no indication that the E-commerce architecture of Fig. 5 identifies the types of products currently of interest to the customer. The Examiner has already conceded that Miloslavsky et al. does not teach the use of the value of one or more items currently associated with a contact to determine the resource to which the contact is to be routed. (First Office Action at page 3.) Miloslavsky et al. thus does not teach the analysis of the contents of the displayed web page, let alone the

customer's specific selections from one or more displayed web page(s), in routing the help request to an agent.

In the April 26, 2005, Final Office Action at ¶ 7-9 at pages 6-7, the Examiner claims that Miloslavsky et al. does disclose, at col. 38, lines 20-35 and Figs. 21-22, "using the identity of the item to select a product expertise support person"; however, "product expertise" is used for routing incoming contacts in a very different architecture than is depicted in Fig. 22. Fig. 22 is a block diagram of e-mail-to-CTI-server adapter 6110 that includes an e-mail interface 6202 and information extractor 6204 for extracting relevant information from e-mails. The extractor 6204 contains a parser 6206 for parsing the content of the e-mails obtained from e-mail server 6102. Examples of relevant information include addresses, time stamp, and e-mail content keywords. (Col. 37, line 43, to col. 38, line 6.) The architecture is used to route not help requests requiring outgoing contacts to be made but incoming contacts, particularly emails in an email processing center 6100. (Col. 36, lines 51-54.) An address "support@abccompany.com" is associated with the email server 6102. Incoming emails may relate to all aspects of the products and services offered by ABC. (Col. 36, lines 22-24.) Some of the emails may contain technical questions of a product. Others may contain suggestions on improving the products and services. (Col. 36, lines 29-34.) In this configuration, Miloslavsky states:

One aspect of the present invention is a system for automatically routing the e-mails to the most qualified and available support person. For example, a support person may be an expert in one product of ABC. All e-mails related to this product will be routed to this person automatically. Further, the system can distribute the load so that every support person receives approximately the same number of e-mails. As a result, the problems of the prior art systems can be solved.

(Col. 36, lines 38-47.) The contents of the e-mail are parsed because there is no other information about the customer's needs available. The customer is not currently connected to the contact center. As can be seen from the foregoing, the referenced architecture does not teach the evaluation of information displayed in a web page, let alone the evaluation of one or more items selected by a customer from a web page for possible purchase, to identify the value(s) and/or type(s) of at least one selected item for use in routing the customer contact or a customer contact request to a working agent and/or queue.

The Examiner's reliance on the Miloslavsky et al.'s teachings in the context of two disparate architectures is nothing more than impermissible hindsight reconstruction of the claimed invention. It is well established that an examiner must forget about what he or she has been taught by the inventor about the claimed invention and cast his or her mind back to the time the invention was made to replicate the mind of one skilled in the art who is presented only with the references and not normally guided by the then-accepted wisdom in the art. *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983). One cannot use hindsight reconstruction to pick and choose among isolated discloses in the prior art to depreciate the claimed invention. *Symbol Technologies, Inc., v. Opticon, Inc.*, 935 F.2d 1569, 19 USPQ2d 1241 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Like Miloslavsky et al., Walker et al. does not teach or suggest the routing of a second contact with a customer on a second channel based on information obtained in a first contact with the customer on a first channel. Rather, Walker et al. routes an incoming customer contact based only on order information obtained by the IVRU from the customer as part of the same customer contact on the same channel. In other words, the claimed invention has already obtained the

information before the second contact is even initiated while Walker et al. requires the information to be collected as part of the contact that is to be routed. At most, Walker et al. teaches the collection of item value in a first contact and use of the collected item value in selecting an appropriate resource for servicing of the first contact.

C. Neither Miloslavsky et al. Nor Walker et al. Teach or Suggest the Use of Item Type in Routing a Request for a Further Customer Contact to a Resource for Servicing - Claims 44-45 and 47-84 (Claim Groups D and F).

As noted previously, Miloslavsky et al. teaches the use of item type only in routing emails relating to products and services to agents. It specifically teaches traditional call center criteria in directing to agents help requests from web browsing customers.

Walker et al. teaches the use of economic value based on order information in routing the call. The economic value for a call is based "on the total dollar amount of the order, the value of the customer, and may also include the origin of the calling phone number." (Col. 5, lines 56-59.) Walker et al. does not teach the use of item type in determining the economic value for a call.

D. Neither Miloslavsky et al. Nor Walker et al. Teach or Suggest the Use of an Icon in a Web Page to Initiate a Request for Customer Assistance

Coupled with Product Order Analysis to Decrease the Likelihood of Abandonment of the Browsing Session by the Customer (Claim Groups A-F).

Miloslavsky et al. does teach the use of an icon in a web page to initiate a request for customer assistance but does not teach the analysis of the information displayed to the customer or selected by the customer when the request was received let alone the use of the analytical results in routing the request to an agent. Walker et al. gathers the order information from an

IVRU over the telephone. The information is conveyed to the IVRU via DTMF digits. It is not conveyed as part of a Web browsing session.

E. Neither Miloslavsky et al. Nor Walker et al. Teach or Suggest

Downloading an Applet onto the Customer's Computer such that the

Applet Evaluates, on the Customer's Computer, the Set of Selected Items
and Forwards the Evaluation Results to the Contact Center for Proper
Routing of the Requested Contact (Claim Groups A-F).

Moreover, as conceded by the Examiner at page 4 of the April 26, 2005, Final Office Action, neither Walker et al. nor Miloslavsky et al. teach or suggest downloading of the evaluator onto the customer's computer so that the evaluator can examine on the customer's computer the type and/or value of the items in the set of items selected by the customer. This is a far more efficient configuration than transmitting all of the Web page contents to an on-site component of the E commerce center for analysis. Although Miloslavsky et al, is directed to an E commerce center, it does not teach the analysis of the contents of the Web page in connection with contact routing let alone the performance of the analysis on the customer's computer.

To overcome the deficiencies of Miloslavsky et al. and Walker et al., the Examiner states, without documentary support, that it would have been obvious to use "an applet [ in the architecture of Miloslavsky et al.] for accessing and computing the order since this is well known in the art for on-line customer orders." (Final Office Action at page 4.) The Examiner not only provides *no* motivation why one of ordinary skill in the art would wish to perform pre-routing analysis of an electronic order on the customer's computer rather than on the vendor's computer, *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) ("Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so . . ."), but also fails to address both the claimed use

of the applet for collecting contact routing information and the specific order analysis steps being performed by the applet on the customer's computer, *In re Thrift*, 63 USPQ2d 2002, 2007 (Fed. Cir. 2002) (claims for speech interface incorporating grammar-creation features were improperly rejected on the ground that "the use of grammar is old and well-known in the art of speech recognition as a means of optimization that is highly desirable" since this statement generally addresses the use of grammar but fails to discuss unique claim limitations directed to extracting, modifying, or processing grammar to interact with hypermedia sources). *See also, In re Lee*, 61 USPQ2d (Fed. Cir. 2002) (it is improper to substitute the "common knowledge" of one skilled in the art for specific evidence that the prior art suggests an invalidating combination of references).

There is simply no motivation to modify the architecture of Miloslavsky et al. to include an applet to perform the alleged order analysis of Walker et al. Regarding what happens when a customer requests help, Miloslavsky et al. states:

When the user in customer site 104 is reviewing information on browser 1116 or is about to place an order, the user may request the attention of a service agent in service assistance center 1140. . . It is desirable for the service agent to display on his/her computer 1146 the same web page displayed on browser 1116 while interaction with the user through telephone. It is also desirable for the service agent to obtain as much information about customer site 1104 as possible prior to commencing telephone communication with the user.

One aspect of the present invention provides automatic coordination between the telephone communication and the Internet connection. As an example, when the telephone communication is established, the web page displayed by browser 116 is automatically displayed on computer 1146 together with information about the customer site 1104.

(Col. 12, lines 9-38 (Emphasis supplied).) Elsewhere, Miloslavsky et al. states that the contents of the Web page (or the HTML document) displayed to the customer is sent automatically to the servicing agent to be displayed on the agent's computer. (Col. 12, line 64-col. 13, line 16.)

Finally, Miloslavsky et al. states, at col. 15, lines 54-59, that, when a customer clicks on a "help" icon, the server 1132 sends the telephone number and associated data, including the HTML document associated with the web page displayed on the browser 1116, to the Service Request Process or SRP 1168. SRP 1168 then requests service assistance center 1140 to call the telephone number and selects an agent to talk to with the user. To consider any customer alterations to the information in the web page, the entire contents of the web page are presumably transmitted by the web browser 1116 back to the server 1132. Thus, Miloslavsky et al. teaches away from the use of an applet downloaded onto the customer's computer to analyze the displayed web page before the help request is routed to extract selected routing information for transmission to the server. Even if it were obvious in light of Miloslavsky et al. to analyze the web page for routing information (which it is not), a skilled artisan would be motivated to have the SRP (which selects the agent and routes the help request) only and not the customer's computer perform the analysis in the Miloslavsky et al. architecture because the entire web page is already in the possession of the SRP before it makes the routing decision. In re Fritch, 922 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (even if the prior art may be modified as suggested by the Examiner, the modification is not obvious unless the prior art suggests the desirability for the modification).

Moreover, the Examiner's official notice fails to address the use of item type. The Examiner's official notice simply states that applets are well known "for accessing and computing" an on-line customer order. Applicants construe this statement to mean that it is known to use an applet to compute the total amount of the order. So construed, the statement still fails to indicate a use of applets for identifying the type(s) of item(s) selected.

F. Neither Miloslavsky et al. Nor Walker et al. Teach or Suggest Including the Item Value and/or Type in a Cookie (Claim Group E).

At col. 15, lines 50-59, Miloslavsky et al. does refer to "cookies" as a form of persistent client state information; however, Miloslavsky et al. says nothing about embedding or including contact request routing information in the cookie. Walker et al. fails to even mention cookies.

# X. <u>CONCLUSION</u>

Based upon the foregoing, Appellant respectfully requests the Board to reverse the Examiner's §103 rejection of all pending claims and to pass the above-identified patent application to issuance.

Respectfully submitted,

SHERIDAN ROSS P.C.

Douglas W. Swartz

Registration No. 37,739

1560 Broadway, Suite 1200

Denver, Colorado 80202-5141

(303) 863-9700

Date July 26, 2005



#### **APPENDIX**

1-43. (Canceled)

- 44. (Previously Presented) A method, comprising:
- (a) providing, on a first communication channel and as part of a first contact with a customer, the first contact being a potential sales transaction with the customer, at least one web page to a web browser associated with the customer, wherein the customer selects, for possible purchase, a set of one or more items from the provided at least one web page;
- (b) receiving, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected by a second contact with the customer on a second communication channel different from the first communication channel;
- (c) downloading, onto a computer executing the customer's web browser, an applet;
- (d) evaluating at least one item in the set of one or more items to identify at least one of (i) an item value and (ii) item type in the set, wherein step(d) is performed by the applet when the applet is being executed by the customer's computer; and
- (e) routing the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) item value and (ii) item type, wherein the set of one or more items is a shopping cart, wish cart, and/or wish list.
- 45. (Previously Presented) The method of claim 44, wherein a first contact on the first communication channel is a Web browsing session, wherein the second contact on the second communication channel is one of a live voice communication, an electronic mail message, and a facsimile, wherein the second contact is an outgoing contact from the selected agent to the customer, and wherein part of the first and second contacts overlap temporally.

10

15

5

5

## 46. (Canceled)

- 47. (Previously Presented) The method of claim 45, wherein the request is an incoming communication from the customer and wherein the routing step is based, at least in part, on item value.
- 48. (Previously Presented) The method of claim 44, wherein the request is a request for an outgoing call from the contact center to the customer and wherein the routing step is based, at least in part, on item value.
- 49. (Previously Presented) The method of claim 44, wherein the request is associated with the customer's selection of an icon on the at least one web page and wherein the routing step is based, at least in part, on item type.
- 50. (Previously Presented) The method of claim 44, wherein the identified item value is contained in a cookie received from the customer's computer.
- 51. (Previously Presented) The method of Claim 44, further comprising: comparing the item value with a predetermined value to determine the agent destination of the routing step.
- 52. (Previously Presented) The method of Claim 44, wherein the selected routing destination is based, at least in part, on a type of item in the set and further comprising:

comparing the item type with a list of items to determine the agent destination of the routing step.

53. (Previously Presented) The method of claim 51, wherein the item value is

the highest value of an item in the set.

- 54. (Previously Presented) The method of claim 51, wherein the item value is the total value of the items in the set.
- 55. (Previously Presented) The method of claim 51, wherein the item value is the average value of the items in the set.
- 56. (Previously Presented) The method of claim 44, wherein the selected routing destination is based, at least in part, on both item type and value.
- 57. (Previously Presented) A computer readable medium comprising instructions for performing the steps of claim 44.

## 58. (Previously Presented) A system, comprising:

a server operable (a) to provide, on a first communication channel and as part of a first contact and a potential sales transaction with a customer, at least one web page to a web browser associated with the customer, wherein the customer selects, for possible acquisition, a set of one or more items from the provided at least one web page; and (b) receive, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected by a second contact with the customer on a second communication channel different from the first communication channel;

an evaluator operable to evaluate at least one item in the set of one or more items to identify at least one of (i) an item value and (ii) item type in the set; and

a router operable to route the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) item value and (ii) item type, wherein the server is operable (c) to effect downloading, onto a computer executing the customer's web browser, an applet and wherein the applet

10

5

15

comprises the evaluator.

- 59. (Previously Presented) The system of claim 58, wherein the first communication channel is a Web browsing session, wherein the second contact is one of a live voice communication, an electronic mail message, and a facsimile, and wherein the first an second contacts occur simultaneously.
- 60. (Previously Presented) The system of claim 58, wherein the set of one or more items is a shopping cart, wish cart, and/or wish list.
- 61. (Previously Presented) The system of claim 59, wherein the request is an incoming communication from the customer and wherein the at least one of (i) item value and (ii) item type is item value.
- 62. (Previously Presented) The system of claim 58, wherein the request is a request for an outgoing call from the contact center to the customer and wherein the at least one of (i) item value and (ii) item type is item value.
- 63. (Previously Presented) The system of claim 58, wherein the request is associated with the customer's selection of an icon on the at least one web page and wherein the at least one of (i) item value and (ii) item type is item type.
- 64. (Previously Presented) The system of claim 60, wherein the identified item value is contained in a cookie received from the customer's computer..
- 65. (Previously Presented) The system of Claim 58, wherein the router is operable to compare the item value with a predetermined value to determine the request's routing destination.

- 66. (Previously Presented) The system of Claim 58, wherein the routing of the customer's request is based, at least in part, on a type of item in the set and wherein the router is operable to compare the item type with a list of items to determine the request's routing destination.
- 67. (Previously Presented) The system of claim 65, wherein the item value is the highest value of an item in the set.
- 68. (Previously Presented) The system of claim 65, wherein the item value is the total value of the items in the set.
- 69. (Previously Presented) The system of claim 65, wherein the item value is the average value of the items in the set.
- 70. (Previously Presented) The system of claim 44, wherein the routing of the customer's request is based, at least in part, on both item type and value.
- 71. (Previously Presented) A method for routing contacts in an E-commerce contact center, comprising:
- (a) providing, on a first communication channel and as part of a potential sales transaction with a customer, at least one web page to a web browser associated with the customer, wherein the customer selects, for possible purchase, a set of one or more items from the provided at least one web page;

5

10

- (b) receiving, from the customer and as part of the same sales transaction, a request for servicing by an agent of the contact center, wherein the servicing is to be effected on a second communication channel different from the first communication channel;
- (c) downloading, onto a computer executing the customer's web browser, an applet comprising an evaluator;

- (d) the downloaded evaluator evaluating at least one item in the set of one or more items to identify at least one of (i) a value of one or more items and (ii) a type of one or more items in the set;
- (e) receiving from the downloaded evaluator an identified at least one of (i) a value of one or more items and (ii) a type of one or more items in the set;

15

20

5

- (f) routing the request of the customer to an agent in the contact center, the agent being selected based, at least in part, on the identified at least one of (i) a value of one or more items and (ii) a type of one or more items in the set.
- 72. (Previously Presented) The method of claim 71, wherein the first communication channel is a Web browsing session, wherein the web browsing session is a first contact between the contact center and customer, wherein the second communication channel is used by a second contact between the contact center and customer, wherein the second contact is one of a live voice communication, an electronic mail message, and a facsimile, and wherein the first and second contacts occur concurrently.
- 73. (Previously Presented) The method of claim 71, wherein the set of one or more items is a shopping cart, wish cart, or wish list.
- 74. (Previously Presented) The method of claim 71, wherein the request is an incoming communication from the customer.
- 75. (Previously Presented) The method of claim 71, wherein the request is a request for an outgoing call from the contact center to the customer.
- 76. (Previously Presented) The method of claim 71, wherein the request is associated with the customer's selection of an icon on the at least one web page.

- 77. (Previously Presented) The method of claim 71, wherein the identified at least one of (i) a value of one or more items and (ii) a type of one or more items in the set is contained in a cookie received from the customer's computer.
- 78. (Previously Presented) The method of Claim 71, wherein the selected routing destination is based, at least in part, on (i) and further comprising:

comparing the item value with a predetermined value to determine the agent destination of the routing step.

79. (Previously Presented) The method of Claim 71, wherein the selected routing destination is based, at least in part, on (ii) and further comprising:

comparing the item type with a list of items to determine the agent destination of the routing step.

- 80. (Previously Presented) The method of claim 78, wherein the item value is the highest value of an item in the set.
- 81. (Previously Presented) The method of claim 78, wherein the item value is the total value of the items in the set.
- 82. (Previously Presented) The method of claim 78, wherein the item value is the average value of the items in the set.
- 83. (Previously Presented) The method of claim 71, wherein the selected routing destination is based, at least in part, on both (i) and (ii).
- 84. (Previously Presented) A computer readable medium comprising instructions for performing the steps of claim 71.